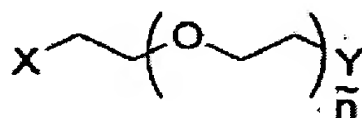


## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application. For ease of review, certain claims, such as claims 3 and 6, are moved to a clean page to avoid a page break within a claim.

### Listing of the claims

1. (Canceled)
2. (Previously Presented) A macromonomer having the structure:



where  $\tilde{n}$  is a real number of 6-300,

and where X and Y each independently is a group of the formula



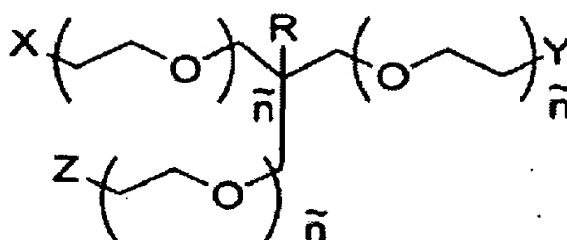
where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl,

or where X is -OH, and Y is a group of the formula



where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl.

3. (Previously Presented) A macromonomer having the structure:



where R is H or alkyl or aryl or arylalkyl,

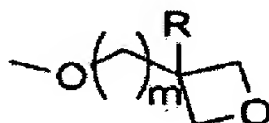
and  $\tilde{n}$  is a real number of 6-300.as defined above

and where X, Y and Z each independently is OH or a group of the formula



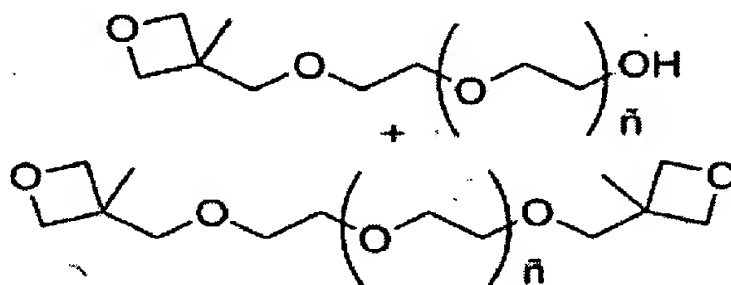
where m is an integer of 1-10, a is as defined above, and R is H or alkyl or aryl or arylalkyl;

provided that at least one of X, Y or Z is a group of the formula



where m is an integer of 1-10, a is as defined above, and R is H or alkyl or aryl or arylalkyl.

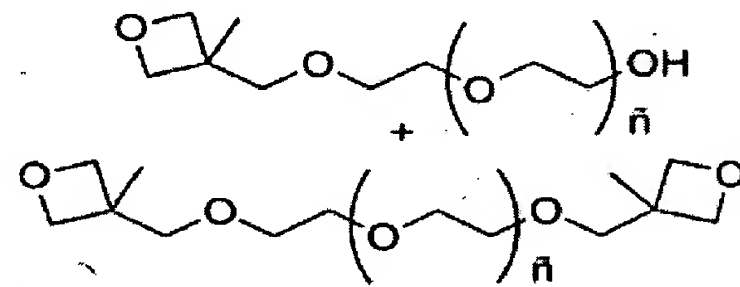
4. (Currently Amended-Withdrawn) The [[A]] macromonomer of according to claim 2 which is terminated by a 3-methyloxetan-3-ylmethyl ether group an 3-methyloxetan-3-ylmethyl ether group and has the formula:



where  $\tilde{n} = 6-300$

~~where R and m are as defined in claim 2.~~

5. (Currently Amended) A macromonomer of claim 2, which is terminated by an 3-methyloxetan-3-ylmethyl ether group and has the formula

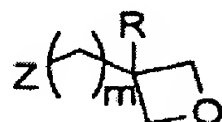


where  $\tilde{n} = 6-300$  and

wherein the macromonomer

~~according to claim 4, which~~ has been acetylated or in other ways temporarily hydroxyl-protected on free hydroxyl groups.

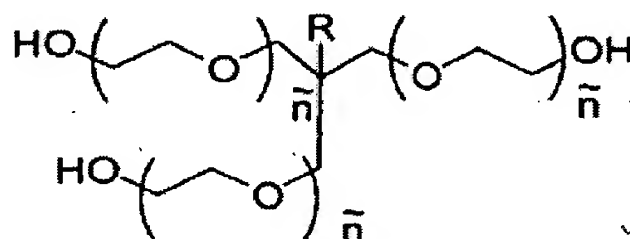
6. (Previously Presented) A process for the preparation of the macromonomer of claim 2 comprising reacting an alkali metal derivative of a polyethylene glycol having 6-300 repeating units with a halo substituted compound having the formula:



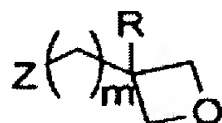
where Z is Cl, Br, I, toluenesulfonyloxy or  $\text{CF}_3\text{SO}_3$

and where m is an integer of 1-10, and R is H or alkyl or aryl or arylalkyl.

7. (Previously Presented) A process for the preparation of the macromonomer of claim 3 comprising reacting an alkali metal derivative of a polyethylene glycol having the formula: -



where R is H or alkyl or aryl or arylalkyl and  $\tilde{n}$  is 6-300 with a halo substituted compound having the formula:



where Z is Cl, Br, I, toluenesulfonyloxy or  $\text{CF}_3\text{SO}_3$

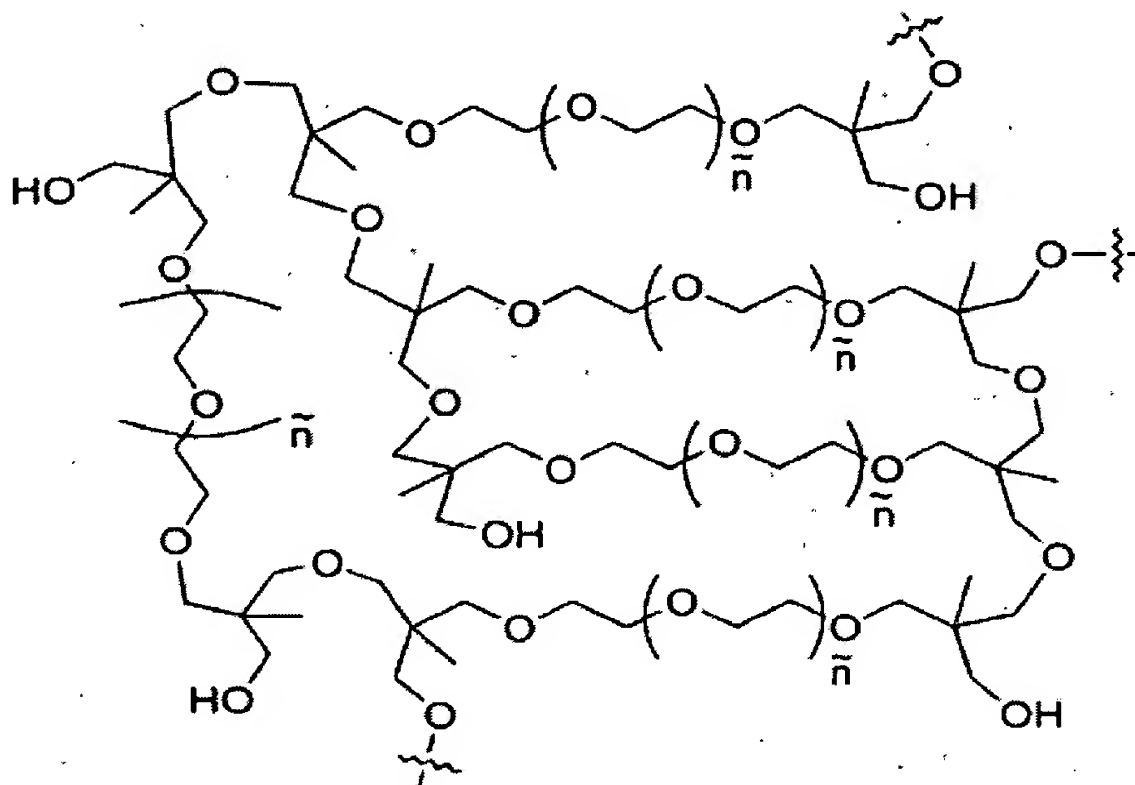
and where m is 1-10 and R is H or alkyl or aryl or arylalkyl

8. (Previously Presented) A process according to claims 6 or 3 wherein the alkali metal derivative is a sodium derivative.

9. (Previously Presented) A process according to claims 6 or 3 wherein the alkali metal derivative is a potassium derivative.

10. (Currently Amended) A cross linked polymer formed by the polymerization of a macromonomer of ~~according to~~ claim 2.

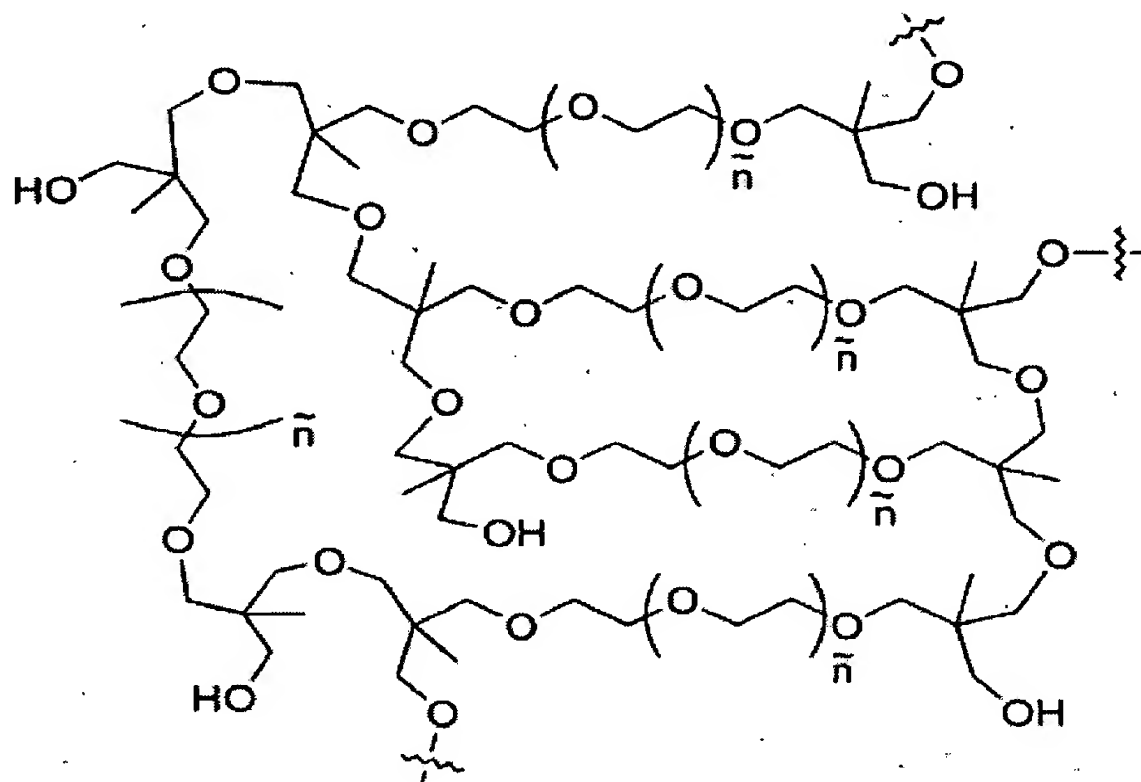
11. (Currently Amended) A cross linked polymer formed by the polymerization of a macromonomer of claim 4 ~~according to claim 10~~ wherein the ~~macromonomer has the structure claimed in claim 4, the polymerisation is initiated by a cationic catalyst and the structure of the polymer is:~~ may be represented by the structure:



where  $\tilde{n} = 6-300$

~~where R is as defined in claim 1.~~

12. (Currently Amended) A cross linked polymer formed by the polymerization of the macromonomer of claim 5, ~~wherein according to claim 10 wherein the macromonomer~~ ~~macromer used for its preparation has the structure of claim 5 and~~ the per-*O*-acetylated or in other ways temporarily hydroxyl-protected polymer structure is an analog of ~~[[to]]~~ the hydroxylated structure; ~~of claim 11 is obtained.~~



where  $\bar{n} = 6-300$ .

13. (Currently Amended) A cross linked polymer formed by the bulk polymerization ~~polymerisation~~ of a macromonomer of claim 3.

14. (Canceled)

15.-27. (Canceled)

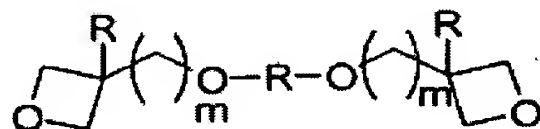
28. (Currently Amended) A beaded polymer, comprising the cross linked polymer of according to claim 10, claim 11, or claim 12 wherein the beaded polymer is formed by suspension polymerization in silicon oil.

29. (Currently Amended) The ~~[[A]]~~ beaded polymer of according to claim 28 where the beads are stabilized by a surfactant.

30. (Currently Amended) The [[A]] beaded polymer of ~~according to~~ claim 29 where the surfactant is obtained by radical polymerization of a mixture of acryloylated PEG-OMe and acryloyl propyl pentamethyl disiloxane.

31. (Currently Amended) The [[A]] polymer of ~~according to~~ claim 10, further comprising ~~with addition of~~ a short temporary crosslinker which can ~~may at a later point in time~~ be selectively cleaved to result in expansion of the resin.

32. (Currently Amended) The [[A]] polymer of ~~according to~~ claim 31 where the short crosslinker has the structure



where R is a alkyliden, aryliden, silane, siloxane thioether or ether bridge chemically susceptible to selective cleavage conditions.

33.-34. (Canceled)